

## A further specimen of the extinct Jamaica Petrel *Pterodroma caribbaea* (Carte, 1866)

by Bernard Zonfrillo

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**SUMMARY.**—Of the three or four extinct marine bird species in the North Atlantic, Jamaica Petrel *Pterodroma caribbaea* is arguably the least known. The number of known specimens—26—is around one third of those for Great Auk *Pinguinus impennis* and around half that of Labrador Duck *Camptorhynchus labradorius*. The petrel first became known anecdotally in the c.1780s and the first recorded specimens, collected in 1829 and the 1840s, were forwarded from Jamaica to England, but no taxonomic description was published until 1866, when Alexander Carte named the species *Pterodroma caribbaea*. However, two earlier birds sent to England were seemingly ‘lost’. No Jamaica Petrel has been seen alive since 1879. I located what is probably one of the first-ever specimens and discuss why no description of it was published.

The earliest mention of what was surely Jamaica Petrel *Pterodroma caribbaea* was by Browne (1789), a bird he referred to as the ‘Larger Dark Peterill’. Dr E. N. Bancroft (1829) subsequently suggested that, what was probably this species, be called ‘*Procellaria jamaicensis*’ without description—and therefore a *nomen nudum*. Bancroft had collected one or two skins but could find no description of a similar species in any of the books in his possession, so he sent one to the editor of the *Zoological Journal* in 1829. Bancroft, in his letter, provided some information as to how the bird was hunted on Jamaica’s highest point, Blue Mountain Peak, on 17 March 1829 by a terrier dog, and was apologetic regarding the sorry state of the specimen. He stated that the species ‘... burrows only in crevices on the tops of our highest mountains, scarcely accessible’. There is no record of where Bancroft’s specimen ended up, other than with the editor of the journal. Known specimens, all collected in the Cinchona area of Jamaica’s Blue Mountains, number 26 individuals (Imber 1991). However Gosse (1847), who never saw the species alive but thought it was probably an alcid, reported that the bird was known locally as ‘Blue Mountain Duck’. Specimens were apparently collected from Jamaica’s Blue Mountains during Gosse’s time, but Jamaica Petrel was not formally described until nearly 20 years later, by Carte (1866). Gosse (1847) and Carte (1866), quoting Richard Hill, recorded that William Thomas March knew of two individuals collected in Jamaica. The first obtained by Mr George Atkinson of Newcastle-upon-Tyne and the second by Sir Henry Barkly. Promised a description of the bird by Atkinson, Gosse (1847) noted that this never subsequently transpired. A further pair was collected by W. T. March and forwarded to Dublin, where described by Carte (1866). These specimens, syntypes, are now in the National Museum of Ireland, Dublin. The delay in publishing the description of this new species was partially due to the first two collected specimens becoming apparently ‘lost’ or untraceable, and one of the recipients, George Atkinson, dying before a description could be prepared. In Carte’s description, mention of the first specimen being sent to Atkinson, shortly before the latter’s death, suggested to me that the skin mentioned by Gosse was perhaps still extant in the Newcastle area, where Atkinson was long resident.

Most specimens (22) were obtained by Kew botanist William Nock during his time at Cinchona in Jamaica. Specimens attributed to others as 'collected' were probably those transported by couriers from Jamaica to England. None was ever taken at sea, or from any other island. Knox & Walters (1994) erroneously stated that 'only about 7 specimens were ever collected', whereas Bourne (1965) had seen nine skins and knew of six others acquired by Edward Newton and 'dispersed' to various museums around the world. Prof. A. Newton noted in a register of birds from Jamaica that William Nock had collected all 22 birds at Cinchona, in November–December 1879 (Benson 1972). Two mounted Nock specimens are at the Institute of Jamaica in Kingston (pers. obs.). They were listed by Imber (1991) within his total of 26 known specimens, 22 taken by Nock, two—the syntypes—from W. T. March and one each that came via J. Gould and J. Taylor now at the Natural History Museum, Tring (NHMUK). The latter two, not personally collected by either Gould or Taylor, being donations, perhaps came from March, or perhaps Bancroft? Knox & Walters (1994) specifically mentioned the 'extremely delicate' state of one of the NHMUK skins and that it was collected 'prior to 1875'. This may fit the terrier-chewed description by Bancroft. Presumably Sir Edward Newton also obtained his six specimens from William Nock, who clearly knew where the birds bred, having spent seven years at Cinchona, cultivating trees for medicinal purposes.

Cinchona, at c.2,000 m above sea level, is not easy to reach and its tracks and paths are frequently washed away due to heavy rainfall and hurricanes (pers. obs.). Cinchona lies north of Kingston in the parish of St. Andrew, at the head of the Green River. During the petrel's winter breeding period of November–February, strong convection up-draughts can build after nightfall, probably making this area ideal for flying or certainly fledging in an otherwise unremarkable part of the forested Blue Mountains (pers. obs.). Temperatures can be low for Jamaica at 10+°C, but ideal for rearing a down-covered chick in a burrow, where daytime temperatures usually exceed 30°C. Nearby Blue Mountain Peak, where Bancroft claimed his 1829 specimens were collected, has not been thoroughly searched. However, that name was given well before Cinchona was established as a botanical garden (in 1868) and the Cinchona area may have been the epicentre of the petrel colony on that ridge, Bancroft using Blue Mountain Peak as the closest named geographical feature.

Despite several searches on land in Jamaica over the decades (Scott 1891, Diamond 1971 in van Halewyn & Norton 1984), including by the author (1990s and 2001), no certain examples of this petrel have been encountered since 1879, when the last birds were taken by Nock at Cinchona. The species is now generally believed to be extinct. Recent (1997 and 2009) searches at sea off south-east and northern Jamaica, respectively, also drew a blank (BZ pers. obs.; [www.birdscaribbean.org/wp-content/uploads/2015/BCPEWG/Shirihai\\_Jamaica\\_AtSea\\_Nov09.pdf](http://www.birdscaribbean.org/wp-content/uploads/2015/BCPEWG/Shirihai_Jamaica_AtSea_Nov09.pdf)). However, much suitable habitat in Jamaica remains to be searched and knowing the history of other *Pterodroma* spp., both in the Americas and elsewhere, searching for the Jamaica Petrel should not cease.

### **The Hancock Museum (Newcastle) specimen**

Through correspondence with Dr R. Stobart at the now re-named Great North Museum (formerly Hancock Museum) in Newcastle-upon-Tyne, I established that a petrel, reg. no. B106.48, in the skin collection, appeared to be a 'dark-phase Black-capped Petrel *Pterodroma hasitata*'. Subsequently, during a visit to the museum, I was able to confirm its identification as *P. caribbaea*. Attached to the bird was an apparently contemporaneous tag with the words 'W. J. Trevelyan' and 'Trinidad', both written in ink, but without additional data.

There are no records of *P. caribbaea* from Trinidad, although its former occurrence at sea anywhere in the Caribbean or even Atlantic was by no means impossible. However,

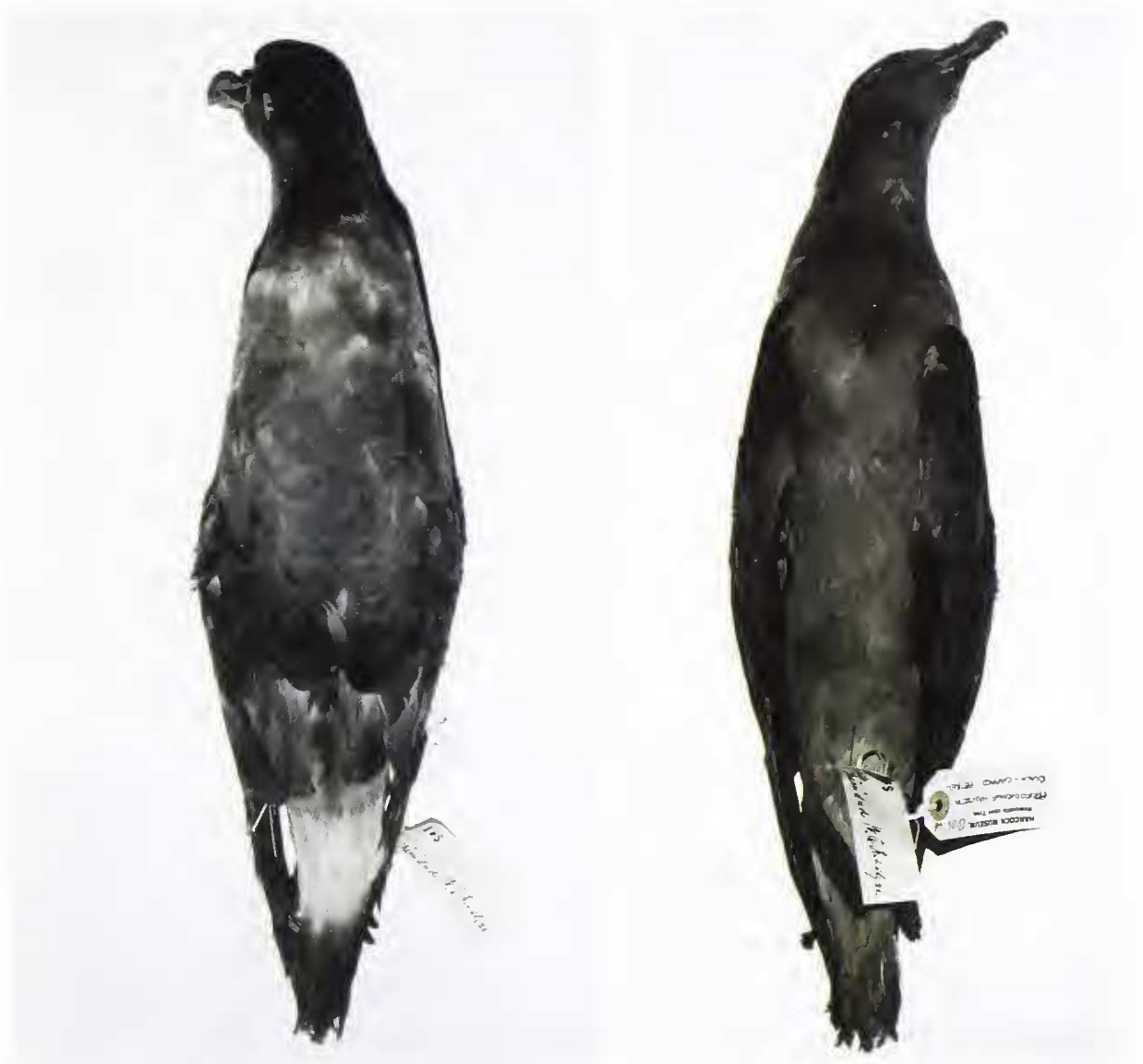


Figure 1. The Hancock Museum specimen of Jamaica *Pterodroma caribbaea*, dorsal (left) and ventral images (Bernard Zonfrillo)

Trinidad has neither breeding petrels, nor records of any other *Pterodroma* species, and has many predators (French 1973). Trevelyan was a notable sea captain and certainly brought back other natural history material from the Caribbean to the Newcastle area, but other bird skins, also labelled as being from the Caribbean, clearly originate from the Indian subcontinent. Friends of Captain Trevelyan, particularly William Kelaart and his brother, both Ceylon-born medics, frequently sent natural history specimens to him from Ceylon and later Trinidad. It seems probable that in visiting various ports, Trevelyan assembled material from different islands and, if labels were lost in transit or became detached from their specimens, he replaced them with one based on the last port of call, or was simply confused as to the petrel's origin. Consequently, the specimen probably received its label when being forwarded to George Atkinson or might equally have been placed on the specimen long after reaching Newcastle. It was donated to the Hancock Museum one year after his death by George's brother, Richard Atkinson, in 1848 (R. Stobart *in litt.* 2001). To further confuse matters, the Hancock Museum has a note stating that a 'package of bird skins from Trinidad' apparently including the Jamaica Petrel specimen, was donated by

Walter Calverly Trevelyan Bt., in 1863, i.e. 15 years after Richard Atkinson had already donated the petrel in question. It may have involved another unknown specimen or more probably never existed? Somehow, the bird first mentioned by Carte, eventually got from Jamaica to Trevelyan to Richard Atkinson, and finally to the Hancock Museum where it has remained. George Atkinson knew from correspondence that Gosse had enquired about a description of the bird taken in Jamaica, and Atkinson initially promised that it would be prepared, but was clearly too ill to produce it before his death.

John Hancock, the Newcastle museum founder, sent many letters to Trevelyan but none mentioned bird specimens (R. Stobart *in litt.* 2001) and Trevelyan, principally a sea captain, would probably have been unaware of the species' status or that it was new to science.

From published records, 26 specimens are known to exist in collections worldwide, just two of them in Jamaica. The few museums sent a specimen received just one or at most two (Benson 1972). These seabirds are far scarcer in collections than, for example, prized Great Auks *Pinguinus impeunis*, and the fact that a specimen—the first to be collected no less—was documented as sent to Newcastle-upon-Tyne must surely point to this being the bird in question and its locality of collection as being Jamaica and not Trinidad. The specimen stated by W. T. March to have been obtained by Sir Henry Barkly has, as yet, not been located, but might possibly also still exist, perhaps under the guise of *P. hasitata* or some other petrel. A search should also be made for this last bird, since 25 of the 26 have now been located. No egg was ever collected.

### *Pterodroma hasitata* and *P. caribbaea*

I was able to trace the first 'undescribed' *P. caribbaea* specimen to the former Hancock Museum, Newcastle-upon-Tyne. Any specimen of *P. hasitata* would also be unusual in a European museum collection, but the Newcastle bird is an obvious *P. caribbaea* (Fig. 1). The so-called 'phases of *P. hasitata* were 'lumped' with Jamaica Petrel by Bond (1936), in a footnote to *P. hasitata*, probably based on little more than the single specimen in the American Museum of Natural History, New York. Darker specimens of *P. hasitata* are usually characterised by lacking the dorsal neck-ring, which is also a feature of some Great Shearwaters *Puffinus gravis*, where the dorsal and crown colours merge (pers. obs.). The neck-ring on *P. hasitata*, when present, is very obvious at sea and is a major identification feature, along with the species' gleaming white underparts and rump (Douglas & Zonfrillo 1997). The rump of *P. caribbaea* is dull lead-grey. The rest of the plumage is sepia. In Carte's notes (1866) he mentioned W. T. March's notion that Richard Hill's recognition of the petrel was based on a description of the Diablotin (Black-capped Petrel) from Dominica, a bird he strangely claimed was 'uncommonly ugly'.

Much has been made of historical and anecdotal occurrences of the Jamaica Petrel away from Jamaica. Bent (1964) stated that the name Diablotin was also applied to Audubon's Shearwater *Puffinus lherminieri*, to add to the confusion. Père Labat (1792) gave an account of the *Pterodroma* in Guadeloupe and Dominica. His notes from 1696 represent a mix of fact and fiction, stating that the Diablotin 'produces two chicks' and that their down is 'yellow', neither of which statements is true. He remarked that the plumage of adults was 'black', which some authors, even today, have taken to indicate that the species involved was Jamaica Petrel. However, along with the fact that virtually all downy young *Pterodroma* are grey or brown and solitary, Jamaica Petrel is also brown, not black, and has an obvious silvery rump patch. Other all-dark species such as Trindade Petrel *P. arminjoniana* or Kermadec Petrel *P. neglecta*, perhaps even the usually coastal Bulwer's Petrel *Bulweria bulwerii*, could have been involved, given their all-brown plumage. Therefore, Labat's comments should not be taken as credible until such time as bones or specimens are verified

from these islands, as to date every specimen, photograph and sighting from Guadeloupe and Dominica has been of typical *P. hasitata*. Bent (1964) also questioned the veracity of these *P. caribbaea* comments but included the species as possibly breeding alongside Diablotins.

The importance of finding what probably was originally destined to be the type specimen of *P. caribbaea* adds to the location of known material of this species. While far from extinct, *P. hasitata* should not have been confused with this distinctive petrel. Unfamiliarity with both species, either as specimens or in the field, combined with attaching new labels to birds long after their death, and incorrect dates of collection has led to the confusion surrounding an extinct species that even when alive was probably always very rare and extremely restricted in its range within Jamaica.

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